## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in this application.

- 1. (currently amended) A process for preparing (S)-α-ethyl-2-oxo-1-pyrrolidineacetamide (levetiracetam) comprising reacting (S)-2-amino-butanamide hydrochloride and 4-chlorobutryl 4-chlorobutryl chloride in a solvent selected from the group consisting of acetonitrile and methyl tertbutyl tert-butyl ether, in the presence of a strong base and the absence of a tetrabutylammonium bromide catalyst, and recovering the crude levetiracetam.
- 2. (currently amended) A process for preparing (S)-α-ethyl-2-oxo-1-pyrrolidineacetamide which comprises cyclizing (S)-N-[1-(aminocarbonyl)propyl]-4-chlorobutanamide, in a solvent selected from the group consisting of acetonitrile and methyl tertbutyl tert-butyl ether, in the presence of a strong base and the absence of a tetrabutylammonium bromide catalyst, and recovering the crude levetiracetam.
- 3. (original) A process of claim 2, wherein the reaction is performed in the absence of a catalyst.
- 4. (currently amended) A process for preparing (S)-α-ethyl-2-oxo-1-pyrrolidineacetamide (levetiracetam) comprising reacting (S)-2-amino-butanamide hydrochloride and 4-ehlorobutryl 4-chlorobutyryl chloride, in an inert solvent, in the absence of a catalyst, and recovering the crude levetiracetam.
- 5. (original) The process of claim 4, wherein the reaction takes place in the presence of a strong base.
- 6. (currently amended) The process of claim 4, wherein the inert solvent is selected from the group consisting of acetonitrile and methyl tertbutyl tert-butyl ether.
- 7. (original) The process of claim 1, wherein the crude levetiracetam comprises less than about 0.4% by weight of (R)- $\alpha$ -ethyl-2-oxo-1-pyrrolidineacetamide.

- 8. (currently amended) The process according to claim 1, wherein the crude levetiracetam comprises less than about 0.2 % by weight of <u>chemical</u> impurities.
- 9. (original) The process of claim 1, further comprising purifying the crude levetiracetam by crystallizing or recrystallizing it from an organic solvent or a mixture of organic solvents to obtain purified levetiracetam.
- 10. (currently amended) The process of claim 9, wherein the organic solvent is selected from the group consisting of ethanol, ethyl acetate, toluene, methylethyl ketone, tetrahydrofuran, isopropylalcohol, dichloromethane, methanol, nitromethane, hexane, and methyl tert-butyl tert-butyl ether.
- 11. (previously presented) The process of claims 1, wherein the strong base is present in an amount of at least about 3 molar equivalents based on the amount of (S)-2-amino-butanamide hydrochloride.
- 12. (currently amended) The process of claim 1, wherein the reaction temperature is maintained at between about -15 degrees eeleius Celsius and about + 15 degrees eeleius Celsius.
- 13. (original) The process of claim 1, wherein the reaction takes place in the presence of a drying agent.
- 14. (original) The process of claim 13, wherein the drying agent is selected from the group consisting of magnesium sulphate, molecular sieves, potassium carbonate, sodium carbonate, and sodium sulphate.
- 15. (currently amended) The process of claim 14, wherein the reaction temperature is maintained at between about 0 degrees eeleius <u>Celsius</u> and about + 5 degrees eeleius <u>Celsius</u>.
- 16. (original) The process of claim 14, further comprising purifying the crude levetiracetam by recrystallizing it from an organic solvent or a mixture of organic solvents to obtain purified levetiracetam.

- 17. (currently amended) The process of claim 47 16, wherein the organic solvent is selected from the group consisting of ethanol, ethyl acetate, toluene, methylethyl ketone, tetrahydrofuran, isopropylalcohol, dichloromethane, methanol, nitromethane, hexane, and methyl tert-butyl tert-butyl ether.
- 18. (currently amended) The process of claim 48 16, wherein the organic solvent is ethyl acetate.
- 19. (currently amended) The process of claim 19 13, wherein the drying agent is potassium carbonate.
- 20. (original) The process of claim 13, wherein the drying agent is molecular sieves.
- 21. (original) The process of claim 14, wherein the drying agent is sodium sulphate.
- 22. (original) The process of claim 1, further comprising adding an acid or a mixture of acids to the completed reaction mixture to adjust the pH to less than about 8.
- 23. (original) The process of claim 22, wherein the pH is adjusted to less than about 7.
- 24. (original) The process of claim 22, wherein the acid or mixture of acids is selected from the group consisting of a mixture of hydrochloric acid and acetic acid, and formic acid.
- 25. (currently amended) Levetiracetam The crude levetiracetam made by the process of any of claims 1–24 1 to 7, 11 to 15, and 19 to 24, having a level of chemical impurities of less than about 0.2 percent.
- 26. (original) A pharmaceutical composition comprising the product of claim 25 and a pharmaceutically acceptable carrier.
- 27. (canceled)
- 28. (canceled)

- 29. (new) A process for preparing (S)- $\alpha$ -ethyl-2-oxo-1-pyrrolidineacetamide, comprising reacting (S)-2-amino-butanamide hydrochloride and 4-chlorobutyryl chloride, in an inert solvent and in the absence of a tetrabutylammonium bromide catalyst, and recovering the crude levetiracetam.
- 30. (new) A process for preparing (S)-α-ethyl-2-oxo-1-pyrrolidineacetamide, which comprises cyclizing (S)-N-[1-(aminocarbonyl)propyl]-4-chlorobutanamide, in an inert solvent and in the absence of a tetrabutylammonium bromide catalyst, and recovering the crude levetiracetam.